IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Arthur R. Alexander	§	Group Art Unit:	2841
		§		
Serial No.:	10/630,886	§		
		§	Examiner:	Tuan T. Dinh
Filed:	07/30/2003	§		
		§		
For:	PROVIDING A RESISTIVE ELEMENT BETWEEN REFERENCE PLANE LAYERS IN A CIRCUIT BOARD	§	Atty. Dkt. No.:	11279
		§		
		§		
		§		

Mail Stop: Appeal
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF AND REQUEST FOR REVIEW

Dear Sir:

Applicant respectfully requests review of the final rejection, in this case. No amendments are being filed with this request. This request is being filed with a Notice of Appeal.

Remarks/Arguments begin on page 2 of this reply.

REMARKS

Claims 15 and 25 are currently pending in this application. Even though the Office stated in a prior Action that these claims contained allowable subject matter, the Office has rejected claim 15 under 35 USC § 102(b) as being anticipated by Sunahara (U.S. Pat. 6,153,290). Claim 25 has also been rejected under 35 USC § 103(a) as being unpatentable over Sunahara in view Chakravorty (U.S. Pat. 6,611,419). This is a pre-appeal brief made in response to a final Office action dated May 19, 2006, which was responsive to Applicant's communication filed on or before February 14, 2006.

Claim 15 - Rejection under 102(b)

Sunahara fails to show or suggest "a discrete resistor having first and second electrodes," as required by Applicant. The Office states that element 12 of Fig. 1 satisfies this requirement. Applicant disagrees. The term "discrete resistor" is a common and well-known term in the art. The term is used to describe a type of resistive component and is descriptive of the component, as it exists prior to assembly. A discrete resistor is an individual component that is functional and can be measured and tested as a distinct entity prior to being assembled into an electronic circuit. The term discrete resistor does not refer the type of material used to make the resistor. Instead, it refers to the fact that prior to assembly, the resistor is a separate distinct (or discrete) component. Sunahara teaches in col. 7, lines 8-18 that element 12 of Fig. 1 is a thick-film resistor that is created by screening a resistive paste onto a ceramic green sheet. Sunahara further teaches creating conductive wires by screening conductive paste onto the ceramic green sheet so that the conductive paste contacts the resistive paste. Sunahara's thick-film resistor does not exist until it is created along with the circuitry and other components on a ceramic substrate. The thick-film resistor cannot be separated from the circuitry and other component on the ceramic substrate. A person of ordinary skill in the art would understand that a thick-film resistor, created as taught by Sunahara, is not a discrete resistor and cannot be separated from the rest of the circuitry on the substrate to become a discrete resistor. Therefore, Sunahara's thick-film resister is not the same as Applicant's discrete resistor. Additionally, the skilled person would understand that thick-film

resistors do not have electrodes as also required by Applicant. These required elements are missing from Sunahara and the rejection is improper.

In rebuttal to the above argument, the Examiner states "the discrete resistor is made by a thick/thin film resistor as taught in so many issued Patents, for example, Petty (U.S. Patent 3,749,971) discloses a discrete resistor is formed by way of a thick film resistor, Riley (U.S. Patent 5,652,562) discloses a thick film resistor (58) being a discrete resistor." (Office Action, page 4, lines 6-9.) Applicant disagrees and submits that the examples cited by the Examiner actually support Applicant's argument. Petty states "In FIG. 2 the various resistor and discharge elements forming each logic or gate element ... is shown as discrete components. However, in a preferred embodiment of the invention as shown in FIG 1, no discrete components are necessary ... the discrete resistor elements are formed by way of thick film resistors." (Petty, col. 2, lines 54-66.) Petty distinctly points out that the prior art, depicted in Fig. 2, uses discrete components (including discrete resistors) but teaches in the preferred embodiment, depicted in Fig. 1, that no discrete components are necessary because they have been replaced by thick film resistors which are made in manor similar to Sunahara's teachings which are not discrete resistors. Petty is clearly showing that there are two types of resistors and that they are not the same.

Riley teaches a type of thermal fuse using a resistor. Riley states "a thick film resistor 58 is disposed on substrate surface 53, preferably via known film screening or printing techniques... the present invention may be used to provide a thermally activated fuse for other known resistor arrangements such as, for example, other film-type resistors and discrete resistors including chip-type resistors, molded resistors and potentiometers to name a few." (Riley, col. 4, lines 50-65.) This is the only use in Riley of the term "discrete resistors" and it clearly shows that discrete resistors are in a class separate from film-type resistors with would include thick-film resistors. Riley thus supports the distinction between film-type resistors that printed on a substrate (i.e., Sunahara's resistors) and discrete resistors (those taught by Applicant).

Neither of the examples provided by the Examiner supports his assertion that the thick-film resistors of Sunahara are equivalent to Applicant's discrete resistors. In fact, these examples support Applicant's argument. Both examples use the industry-accepted

meaning of the term "discrete resistor," which agrees with Applicant's usage. Thus, at least the above elements are missing from the prior art. Therefore, the rejection is improper and the claim is allowable over this reference.

Claim 25 - Rejection under 103(a)

Regarding claim 25, neither Sunahara nor Chakravorty teach or suggest "a discrete resistor having first and second electrodes," as required by Applicant. The Office relies on Sunahara for these elements and as shown above, the elements are missing from Sunahara. The elements are also missing from Chakravorty, which never uses the term resistor. A prima facie case of obviousness has therefore not been established because the combination of the references does not show or suggest all the elements of the claim. The rejection is therefore improper and the claim is allowable over these references.

CONCLUSION

For one or more of the above reasons, the Office has improperly rejected this Application. All of Applicant's claims are therefore allowable over the art of record and Applicant asks that the Office allow all of the pending claims. Please charge any fees that might be due, excluding the issue fee, to deposit account 14-0225.

Respectfully submitted,

Date: October 19, 2006
(Electronically Filed)

/Harden E. Stevens, III/
Harden E. Stevens, III
Reg. No. 55,649

NCR Corporation
1700 South Patterson Blvd.
Dayton, Ohio 45479

(803) 939-6505
(803) 939-5521 (fax)
ss133111@ncr.com (Email)